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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,165	07/07/1999	AKIRA NAKAGAWA	826.1553/JDH	4844

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WASHINGTON, DC 20005

EXAMINER
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WONG, ALLEN C

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/348,165

Applicant(s)

NAKAGAWA ET AL.

Examiner

Allen Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/7/03 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 11-22 have been read and considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch (5,198,901) in view of Yagasaki (5,428,396).

Regarding claim 11, Lynch discloses a motion vector decoding device for decoding an encoding result which is obtained by encoding motion vectors of respective blocks obtained by partitioning each frame of moving image data, comprising: predicting means for predicting a motion vector of a target block

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based on motion vectors of a plurality of blocks adjacent to the target block (fig.17, note "PREDICTION" is done, where in col.10, ln.23+, motion vectors are predicted, also, fig.5, Lynch illustrates a frame with a shaded area of interest, where the information from the four blocks are obtained and utilized for predicting a motion vector); determining means for determining accuracy of a prediction made by said predicting means based on degrees of non-uniformity of the plurality of motion vectors (col.11, ln.18-22 and fig.17, note "MODE" is determined, also note fig.17, element 111); and decoding means for decoding the motion vector of the target block by using a result of the prediction made by said predicting means with a decoding method determined based on a result of the determination made by said determining means (note fig.17, element 98 is a decoding means, a variable length decoder).

Although Lynch does not specifically disclose the prediction of a motion vector is based on motion vector values of blocks adjacent to the target block of the same frame, however, Yagasaki teaches the prediction of a motion vector is based on motion vector values of blocks adjacent to the target block of the same frame (col.18, ln.1-13, Yagasaki discloses that motion vector values of adjacent blocks to the target block in the same frame are utilized for determining a motion vector). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Lynch and Yagasaki as a whole for accurately predicting motion vectors so as to efficiently produce clear, precise images for viewing and saving costs.

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Note claims 12-13 and claims 20-22 have similar corresponding elements. Also, note dependent claims 14-16 are rejected for the same reasons as set forth above for independent claims 11-13.

Regarding claims 17-19, Lynch discloses the plural decoding means (col.10, ln.47-48, Lynch discloses that motion compensation can be done in numerous ways as shown in figs.12, 15 and 16, where the decoding of the motion vector can be done in several ways, thus implies there are multiple ways of decoding) and the selecting means (col.11, ln.18-22, Lynch discloses the mode information is used for applying the proper decoding means).

Regarding claim 23, Lynch discloses the determination of the first absolute value of difference, the second absolute value of difference and the third absolute value of difference (in fig.17, note BMv, FMv and FMv from AO Mv calculated result are the first, second and third motion vector values used for obtaining the first, second and third absolute value of difference, where the values are compared with the threshold in elements 104 and 105 to see if the absolute value of differences are accurate).

***Allowable Subject Matter***

1. Claim 5 is allowed.
2. The following is a statement of reasons for the indication of allowable subject matter: the applicant has rewritten claim 5 into an independent form such that the current claim 5 incorporates the previous limitations of the claim 1. Since there are no prior art references that teach or suggest the current claim 5, it is considered patentable.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Allen Wong  
Examiner  
Art Unit 2613

AW  
12/31/03